

Attorney Docket No. 56104576-84

**AMENDMENTS TO THE CLAIMS:**

Please amend claims 1, 2, 4-7, 9-11, 13, 15, and 18; cancel claims 19-21; and add new claims 22-23. The following listing of claims replaces all previous listings filed in this application.

**Listing of claims:**

1. (Currently Amended) A method of determining the coagulation potential of a plasma sample, the method comprising the steps of:

- (a) pre-incubating the plasma sample with a reagent such that
  - (i) endogenous protein C in the plasma is at least partially converted into activated protein C by the reagent, and
  - (ii) adding factor Xa which is progressively inactivated by antithrombin III/heparin cofactor 2 during the preincubation;
- (b) adding an exogenous reagent which activates factor X to Xa or prothrombin to thrombin in a factor V-dependent manner to the preincubated plasma sample of step (a); ~~reagents to initiate clotting comprising:~~
  - ~~(i) an exogenous reagent which activates factor X to Xa or prothrombin to thrombin in a factor V-dependent manner, and~~
  - ~~(ii) components, such as phospholipid and calcium ions, that are necessary for efficient coagulation of the plasma sample;~~
- (c) monitoring a reaction indicative of the rate of coagulation of the plasma sample;
- (d) comparing the rate of coagulation ~~detected~~ monitored in step (bc) with the equivalent rate determined for an normal individual without impaired coagulation control patient, or comparing the rate of coagulation detected in step (bc) with the equivalent rate determined for the plasma sample in the absence of protein C activator; and
- (e) determining the coagulation potential of the plasma sample from one or other of the comparisons of step (d).

2. (Currently Amended) The method according to claim 1 wherein the reagent ~~used in~~ of step (a) further contains low ~~levels~~ concentrations of glycosaminoglycans.

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3. (Original) The method according to claim 2 wherein the glycosaminoglycans are selected from the group consisting of regular or low weight heparins, and dermatan or dextran sulphates.
4. (Currently Amended) The method according to ~~any one of claims 1 to 3~~claim 1 wherein whereby the exogenous agent ~~that~~ which transforms protein C into activated protein C is substantially diluted whole snake venom.
5. (Currently Amended) The method according to claim 4 ~~wherein~~by the ~~diluted~~ snake venom ~~is~~ Agkistrodon species including ~~is derived from~~ *Agkistrodon Contortrix*, or a related species including *A. Piscovorus*, *A. Bilineatus*, *A.C. Laticinctus*, and *A.C. Moccason*.
6. (Currently Amended) The method according to claim 3-5 wherein the venom is *A. Contortrix* whole venom ~~is and~~ diluted at a concentration of about 0.002%.
7. (Currently Amended) The method according to ~~any one of claims claim 1 to 6~~claim 1 wherein the preincubation in step (a) is carried out at neutral or slightly basic conditions.
8. (Original) The method according to claim 7 wherein the preincubation step is carried out at pH 7.5.
9. (Currently Amended) The method according to claim 1 ~~any one of claims 1 through 8~~ ~~wherein~~whereby the preincubation is carried out for sufficient time for activation of protein C in the plasma.
10. (Original) The method according to claim 9 wherein the preincubation time is about 5 minutes.
11. (Currently Amended) The method according to claim 1 ~~whereby any one of claims 1 to 10~~ wherein the factor Xa is of human or animal origin.
12. (Currently Amended) The method according to claim 1 ~~whereby any one of claims 1 to 11~~ wherein the exogenous reagent which activates factor X to Xa is derived from the venom of Russells viper (*Vipera Russellii*) or other immunologically cross-reactive snake species.
13. (Currently Amended) The method according to claim 1 ~~any one of claims 1 to 11~~ wherein the exogenous reagent which activates prothrombin to thrombin in a factor V-dependent manner is derived from Australian *Notechis*, or *Pseudonaja* or *Oxyuranus* snake venoms.
14. (Original) The method according to claim 13 wherein the snake venom is obtained from the species selected from the group consisting of *Pseudonaja Textilis*, *Notechis Scutatus*, and *Oxyuranus Scutellatus*.

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15. (Currently Amended) The method according to ~~any one of claims 1-14 wherein claim 1~~ whereby reagents in step (b) are combined with other components into a single mixture by the use of surfactants.
16. (Original) The method according to claim 15 wherein the surfactants are non-ionic detergents.
17. (Original) The method according to claim 15 or 16 wherein the single mixture further contains supplemental components selected from the group consisting of buffers, preservatives, hexadimethrine bromide (polybrene) or other agents to reverse the effect of any heparin that may be present in the test samples or which may be added in the preincubation reagent (i), and phospholipid at high ionic strength to overcome non-specific inhibitors such as lupus anticoagulants that may be present in the plasma sample.
18. (Currently Amended) The method according to claim 1 whereby~~any one of claims 1-18 wherein the~~ monitoring a reaction indicative of the rate of coagulation of the plasma sample is a coagulation time assay or a chromometric or uorometric assay using a detectable substrate.
19. (Cancelled)
20. (Cancelled)
21. (Cancelled)
22. (new) The method according to claim 1 wherein are phospholipid and calcium ions are added,
23. (new) The method according to claim 2 wherein the snake venom is diluted  
*A. Contortrix* whole venom.

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In the Title:

Please replace the Title with the following:

--Method for Determining the Coagulation Potential of a Plasma Sample--